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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/901,700	07/11/2001	Taizou Hori	35.C13989 DI	4474

5514 7590 11/27/2006

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EXAMINER

FLETCHER, JAMES A

ART UNIT	PAPER NUMBER
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2621

DATE MAILED: 11/27/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/901,700	Applicant(s) HORI ET AL.	
	Examiner James A. Fletcher	Art Unit 2621	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 29 September 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 27-51 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 27-51 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Arguments

1. Applicant's arguments filed 29 September 2006 have been fully considered but they are not persuasive.

In re page 16, Applicant's Representative states: "Claims...variously recite, *inter alia*, continuously writing the reproduced information signal or image signals into the memory of memory means when the recording mode discriminated is the first recording mode or the reproduction mode is selected is the first reproduction mode, and stopping, on a predetermined cycle, writing the reproduced information signal or image signal into the memory or memory means when the recording mode discriminated is the second recording mode or the reproduction mode selected is the second reproduction mode.

"However, Applicants respectfully submit that none of Takimoto, Law, and Baumeister, et al., even in the proposed combination, assuming, *arguendo*, that such could be combined, discloses or suggests at least the above-discussed claimed features as recited..."

The Examiner respectfully disagrees, for reasons outlined below in the claim rejections.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 27-51 are rejected under 35 U.S.C. 103(a) as being unpatentable over Takimoto (5,966, 496), and further in view of Navco.

Regarding claims 27, 36, 45, and 47-51, Takimoto discloses an apparatus and method for reproducing information signals recorded in first and second recording modes each having different amounts of information signal recorded per unit time (Figures 1, 2, and 5) and at different speeds (Table 1) comprising:

- reproduction heads for scanning and reproducing information signals recorded in the first and second recording modes from a recording medium (Fig. 2, items 4 & 5);
- memory means for storing an information signal reproduced by said reproduction means (Fig 11, item 104);
- mode discrimination means for discriminating a recording mode of the information signal reproduced by the reproduction means (Col 7, line 45);
- reproduction in both modes being carried out by the same pair of heads (Col 6, lines 53-58);
- tracking means for controlling tracking between the recording medium and the reproduction means (Fig, 2, items 6-15);
- control means for controlling a tracking operation of the tracking means in different manners, in accordance with the recording mode of the reproduced information signal (Col 6, lines 59-64); and
- control means for continuously writing the reproduced information signal into the memory means when the recording mode of the reproduced information

signal, discriminated by the mode discrimination means, is the first recording mode (Col 8, lines 13-24), and stopping, on a predetermined cycle, writing the reproduced information signal into the memory means when the recording mode of the reproduced information signal, discriminated by the mode discrimination means, is the second recording mode (Col 13, lines 29-35).

Regarding claims 28 and 37, Takimoto discloses an apparatus wherein the recording modes record at different speeds (Table 1) with the slower speed records less data per unit time than the faster speed (Table 1 and Fig. 5).

Regarding claims 29 and 38, Takimoto discloses an apparatus wherein the information signal includes an image signal (Col 1, lines 13-20), and the image signal of one frame is recorded in $n > 2$ tracks in the first mode, and the image signal of one frame is recorded in $m < n$ tracks in the second mode (Fig. 5).

Regarding claim 30, Takimoto discloses an apparatus wherein the control means changes a period at which an information signal reproduced with the first head is stopped on the predetermined cycle from being written into the memory means when the recording mode discriminated by the mode discrimination means is the second recording mode (Col 13, lines 29-35).

Regarding claims 33 and 39, Takimoto discloses an apparatus wherein the information signal is a compressed image signal (Col 4, lines 54+) which is recorded in a plurality of tracks of the recording medium (Fig 10), and wherein the control means writes an image signal reproduced by the reproduction means into the memory on a track basis (Figs 12 and 15).

Regarding claims 34-35, 40, and 44, Takimoto discloses an apparatus comprising means for expanding the information stored in the memory in accordance with the result of the mode discrimination means and error correction means (Col 5, line 58 – Col 6, line 4).

Regarding claim 41, Takimoto discloses an apparatus wherein the medium is a tape (Col 3, lines 6-8).

Regarding claim 46, Takimoto discloses an apparatus wherein the tracking means outputs a tracking error signal using the reproduced information signal, and wherein the control means generation timing of the tracking error signal in accordance with the discrimination means result (Col 4, lines 1-23).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 31 and 42 are rejected under 35 U.S.C. 103(a) as being unpatentable over Takimoto as applied to claims above, and further in view of Law (3,372,228).

Regarding claims 31 and 42, Takimoto discloses an apparatus wherein the number of heads used for reproduction is based on the mode of reproduction (Col 6, lines 53-58), but does not specifically disclose using a single head for reproduction in the slower data rate mode.

Law teaches a system of recording data on a tape wherein a reduction in signal elements is attained by providing recorded signals to a memory on the basis of the head providing the signal (Col 2, lines 62-70), providing the user with a reduced quality signal, but being economical of the recording medium.

As suggested by Takimoto and taught by Law, providing a signal to a memory from a single head is a well known method of saving storage media space at the expense of image quality.

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify Takimoto in order to provide a signal to the image memory from a single head.

6. Claims 32 and 43 are rejected under 35 U.S.C. 103(a) as being unpatentable over the combination as applied to claims above, and further in view of Baumeister et al (4,931,883).

Regarding claims 32 and 43, Takimoto is silent on the topic of writing to the memory irrespective of the detected recording mode.

Baumeister teaches reading a scan track multiple times, irrespective of the recording mode (Col 2, lines 44-58).

As taught by Baumeister, scanning a record track multiple times irrespective of the detected recording mode provides a continuous signal to the detector without the need for additional switching or memory, and provides the user with an adequate image in a low-cost device.

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify Takimoto in order to provide repeated scanning of a scan track.

Conclusion

7. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

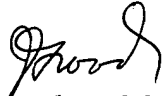
A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to James A. Fletcher whose telephone number is (571) 272-7377. The examiner can normally be reached on 7:45-5:45 M-Th, first Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James Groody can be reached on (571) 272-7950. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

JAF
16 November 2006


James J. Groody
Supervisory Patent Examiner
Art Unit 262 2621